

AMENDMENTS TO THE CLAIMS:

1. (Currently Amended) A method for a device to download a device program data from a non-volatile data source of the device to a volatile memory of the device while connected to a host, comprising the following steps performed by the device:

connecting to a host; and

in response to one of a device power up and a device reset,

waiting for a first request signal from the host;

responding to the first request signal with a first negative acknowledgement (NAK);

initiating downloading the device program from the non-volatile data source of the device to the volatile memory of the device for a predetermined time period based on the request signal; and

in response to a subsequent request signal from the host,

(a) if the device program is not completely downloaded, sending a subsequent NAK and continuing to download the device program from the non-volatile data source of the device to the volatile memory of the device, and

(b) if the device program is completely downloaded, responding to the subsequent request signal by executing the device program[[]].

further comprising updating a download point each time the predetermined time period is completed, wherein the predetermined time period is a first time period for a data

request signal, and a second time period for a status request signal and the first time period is five hundred milliseconds and the second time period is fifty milliseconds.

2. (Previously Presented) The method of claim 1, the non-volatile data source comprising non-volatile memory.

3. (Original) The method of claim 2, the non-volatile memory is at least one of an Electrically Erasable Programmable Read Only Memory (EEPROM) and a flash memory.

4. (Original) The method of claim 2, further comprising reading a signature from the non-volatile memory and validating the signature prior to connecting to the host.

5. (Currently Amended) The method of claim 2, further comprising reading descriptor information from the non-volatile memory prior to connecting to the host.

6. (Previously Presented) The method of claim 1, further comprising setting a pointer for tracking device program data downloaded from the data source.

7. (Cancelled)

8-10 (Cancelled)

11. (Original) The method of claim 1, the host is a USB host and the device is a USB device.

12. (Currently Amended) The method of claim 1, wherein the predetermined time period is monitored by a timer.

13. (Previously Presented) The method of claim 1, further comprising determining and downloading a number of device program data blocks to be downloaded based on the predetermined time period.

14. (Currently Amended) The method of claim 13, wherein the number of data blocks to be downloaded being further based on at least one of a download data rate and a block size.

15. (Original) The method of claim 13, further comprising setting a loop counter based on the number of data blocks to be downloaded.

16-21 (Cancelled)

22. (Currently Amended) A universal serial bus (USB) compatible device, comprising:

a non-volatile memory having firmware stored therein;

a microcontroller unit (MCU)

a volatile memory; and

an instruction memory storing instructions for execution by the MCU upon reset, the execution of the instructions controlling the device to respond with a negative acknowledgement (NAK) in response to a request signal from a host controller, to download the firmware to the volatile memory for use by the MCU for a period of time after responding with the NAK, and to continue to respond with NAKs and to download the firmware until downloading of the firmware to the volatile memory has completed, and to execute the firmware in response to a request signal thereafter[.], wherein the MCU downloads data blocks associated with the firmware for a predetermined time period based on the request signal type from the host controller, the predetermined time period is a first time period for a signal with a data stage and a second time period for a signal without a data stage and the first time period is five hundred milliseconds and the second time period is fifty milliseconds.

23. (Original) The device of claim 22, further comprising a memory for storing a download pointer to track the firmware download.

24. (Cancelled)

25. (Currently Amended) The device of claim [[24]] 22, wherein the MCU further determines the number of data blocks to be downloaded for the predetermined time period based on download data rate and a block size.

26, 27 (Cancelled)

28. (Original) The device of claim 23, further comprising a timer for monitoring the firmware download.